

From: [Marincola, JamesPaul](#)
To: [Lim, Joann@Waterboards](#)
Cc: [Outwin-Beals, Brandi@Waterboards](#); [Stuber, Robyn](#); [Denton, Debra](#)
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492
Date: Tuesday, March 03, 2015 9:15:47 AM
Attachments: [PadreDam_EPAtoxicitycomments.docm](#)

One more addition to the MRP (on Reporting of Toxicity Monitoring Results, pages E-14 and E-15)

Thanks!

Jamie Marincola
Water Division
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San Francisco, CA
415-972-3520

From: Marincola, JamesPaul
Sent: Monday, March 02, 2015 6:28 PM
To: 'Lim, Joann@Waterboards'
Cc: Outwin-Beals, Brandi@Waterboards; robyn stuber; Denton, Debra
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Joann-

Attached are our comments on the toxicity language. We have not had time to dive into the fact sheet yet, however, Robyn wanted me to stress that RPA needs to be done on chronic toxicity and the current language about the petitions and upcoming tox policy is not sufficient to rationalize not including numeric toxicity limits. I've attached a recent letter to RB4 which outlines the rationale.

Sorry for going down to the wire, but our toxicity experts are spread a little thin right now! Let us know if you have questions on RPA or the attached comments.

Thanks,

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Thursday, February 26, 2015 12:55 PM
To: Marincola, JamesPaul
Cc: Outwin-Beals, Brandi@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Hi Jaime,

Any idea when you could provide comments on the toxicity language? The tentative public release date is Monday, March 9.

Thanks,
Joann

From: Lim, Joann@Waterboards
Sent: Thursday, February 19, 2015 4:43 PM
To: Marincola, JamesPaul@epamail.epa.gov
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Yes, please see attached reports.

From: Marincola, JamesPaul [<mailto:Marincola.JamesPaul@epa.gov>]
Sent: Thursday, February 19, 2015 4:17 PM
To: Lim, Joann@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

This looks helpful. Do you think you can explain, or perhaps just send the quarterly reports for, 2012 Q1? Looks like there was some toxicity, but then they maybe did multiple tests?

Thanks,

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Thursday, February 19, 2015 11:48 AM
To: Marincola, JamesPaul
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Jaime,

Please see attachment and let me know if you need more details.

Thanks,
Joann

From: Marincola, JamesPaul [<mailto:Marincola.JamesPaul@epa.gov>]
Sent: Wednesday, February 18, 2015 4:06 PM
To: Lim, Joann@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Oh! That's what I get for not reading through the whole email and jumping to the pretty chart.

Just modify the chart to match the data in the quarterly reports. Looks like they have a column for NOEC, one for LOEC and one for TU, so just modify the table accordingly and delete the other columns. Also, note that the fathead minnow is an acute test, so that would be represented as TUa (instead of TUC). Maybe have a separate column for TUC and TUa?

Thanks!

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Wednesday, February 18, 2015 3:45 PM
To: Marincola, JamesPaul
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

No, they monitor quarterly. I was wondering if I should try to fill the table in or just send you the report. I am not sure what the last column is.

From: Marincola, JamesPaul [<mailto:Marincola.JamesPaul@epa.gov>]
Sent: Wednesday, February 18, 2015 3:43 PM
To: Lim, Joann@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Thanks, this definitely gives a good sense of the data, but is this the only toxicity result you have? Were they only required to monitor for toxicity once in the last permit term?

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Wednesday, February 18, 2015 3:36 PM
To: Marincola, JamesPaul
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Hi Jamie,

I am not sure about all the columns in your example. Using your example table, I tried to fill in the information below in red. Please let me know if I filled it in correctly for the attached report for Monitoring Location EFF-001 (Lake One) and let me know where the missing data is for the last column. I'll gather the rest of the data after I hear back from you. Or I could send you each quarterly report. Please let me know what is best.

Thanks,
Joann

Toxicity

Date	Test Species	Endpoint	NOEC	TUc	Monthly Median (TUc)	EC/IC25 <u>=LOEC?</u>	%Effect in 100% Sample
	<u>Selenastrum</u>					>100%	

<u>10/23/2014</u>	<u>capricornutum</u> <u>(green algae)</u>	<u>96-hr</u> <u>growth</u>	<u>100</u>	<u>1.0</u>	1	>100%	<u>???</u>
<u>10/23/2014</u>	<u>Pimephales</u> <u>promelas</u> <u>(Fathead minnow)</u>	<u>96-hr</u> <u>survival</u>	<u>100</u>	<u>0.0</u>		>100% >100%	<u>???</u>

From: Marincola, JamesPaul [<mailto:Marincola.JamesPaul@epa.gov>]
Sent: Wednesday, February 11, 2015 4:43 PM
To: Lim, Joann@Waterboards
Cc: Outwin-Beals, Brandi@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Thanks!

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Wednesday, February 11, 2015 4:42 PM
To: Marincola, JamesPaul
Cc: Outwin-Beals, Brandi@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Hi Jaime,

I hope to get you the data by next week.

Thanks,
Joann

From: Marincola, JamesPaul [<mailto:Marincola.JamesPaul@epa.gov>]
Sent: Wednesday, February 11, 2015 4:12 PM
To: Lim, Joann@Waterboards
Subject: RE: Toxicity Language in draft order, NPDES Permit No. CA0107492

Hey Joann,

I shared the toxicity language with Robyn, as well, and she was interested in seeing all the toxicity data (and RPA). She also mentioned that it might be helpful to include this data in the fact sheet since it's sometimes hard to decipher a straight RPA for toxicity. As an example, the data would look something like this:

A. Compliance Summary

1. Toxicity

Date	Test Species	Endpoint	NOEC	TUc	Monthly Median (TUc)	EC/IC25	%Effect in 100% Sample
3/3/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	-2.6% 3.3%
3/10/2009	<i>Pimephales promelas</i>	Survival Growth	80% 80%	1.2 1.2		>100% >100%	12.5% 9.5%
3/24/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0		>100% >100%	12.8% 11.6%
6/4/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	-2.6% -2.6%
	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -3.6%
	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100%	-44.3%
7/7/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	-5.3%-0.4%
8/4/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	-2.6% -5.0%
8/6/2009	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100% >100%	-51.7%
9/15/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	0% -1.8%
	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -10.8%
9/17/2009	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100% >100%	-29.5%
10/6/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0		>100% >100%	-2.6% -2.1%
10/8/2009	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100%	-12.8%
11/17/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0		>100% >100%	0% 0.8%
	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 40%	1.0 2.5		>100% 39.2%	0% 50.7%
12/3/2009	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0		>100% >100%	-2.6% 12.7%
	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -1.8%
1/5/2010	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 80%	1.0 1.3		>100% >100%	0% 20%
1/7/2010*	<i>Pseudokirchneriella subcapitata</i>	Cell density	Invalid	N/A		>100%	-30.6%
1/19/2010	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0		>100% >100%	2.5% 1.0%
	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -5.7%

1/21/2010	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100%	-19.2%
10/4/2011	<i>Pimephales promelas</i>	Survival Growth	100% 100%	1.0 1.0	1	>100% >100%	-5.5% -6.8%
10/4/2011*	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	10% 12.0%
10/7/2011	<i>Pseudokirchneriella subcapitata</i>	Cell density	100%	1.0		>100%	-26.8%
4/12/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	cancelled cancelled	NA	NA	NA	NA
8/14/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	<12.5% <12.5%	>8.0 >8.0	1	9.5% 9.1%	25.0% 22.5%
8/23/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -9.6%
8/28/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -13.1%
10/2/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	<12.5% <12.5%	>8.0 >8.0	1	10.4% 48.0%	40.0% 19.3%
10/25/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	10.0% 1.9%
10/31/2012	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0		>100% >100%	0% -9.6%
9/17/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	25% 25%	4.0 4.0	>1	31.1% 29.2%	60.0% 67.4%
9/27/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	25% 25%	4.0 4.0		44.4% 30.3%	70.0% 59.6%
10/8/13	<i>Ceriodaphnia dubia</i>	Survival Reproduction	12.5% <12.5%	8.0 >8.0	Accel. Test #1	15.3% 13.2%	100% 100%
10/22/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0	Accel. Test #2	>100% >100%	11.1% 0.4%
11/5/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0	Accel. Test #3	45.8% 48.3%	10.0% 9.1%
11/19/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	Invalid		Accel. Test #4		
12/3/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0	Accel. Test #5	>100% >100%	0% -7.0%
12/17/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0	Accel. Test #6	>100% >100%	-11.1% -43.0%
12/31/2013	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 100%	1.0 1.0	Accel. Test #7	>100% >100%	10.0% 11.9%
1/14/2014	<i>Ceriodaphnia dubia</i>	Survival Reproduction	100% 12.5%	1.0 8.0	Accel. Test #8	>100% >100%	11.1% 21.6%

Thanks!

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From: Lim, Joann@Waterboards [<mailto:Joann.Lim@waterboards.ca.gov>]
Sent: Wednesday, February 04, 2015 4:17 PM
To: Denton, Debra@Waterboards
Cc: Outwin-Beals, Brandi@Waterboards; Marincola, JamesPaul
Subject: Toxicity Language in draft order, NPDES Permit No. CA0107492

Debra,

I am working on the draft order for Padre Dam Municipal Water District, Ray Stoyer Water Reclamation Facility, discharge to Sycamore Creek, San Diego County, NPDES Permit No. CA0107492. A working draft has been sent to Jamie Marincola.

Could you help me with the toxicity language? The toxicity language from the working draft is attached in a word document. If you are able to help, we would appreciate your input by COB February 27, 2015 or earlier if possible. The public release is currently scheduled for March 6, 2015, and the permit renewal is currently scheduled for consideration by the San Diego Regional Board at its May 2015 Board meeting.

I look forward to taking the Intro to Aquatic Toxicity Testing in May in San Diego.

Thanks,
Joann
Joann.Lim@waterboards.ca.gov

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